

second for downstream and upstream data throughput. The lower graph in FIG. 45 shows a graph of time vs. transfer rate in bits per second for web site throughput in an example of the invention. In FIG. 46, the top graph shows a graph of time vs. delay in milliseconds for roundtrip latency from the wireless broadband router to the head-end for 1 ping. The middle graphs shows a graph of time vs. delay in milliseconds for roundtrip latency for a 10 ping average. The lower graph shows a graph of time vs. SNR.

From the market page 2710, if the user selects the key performance indicator page 2790 by sector or market with a date range, then the market performance management system 430 generates and transmits the key performance indicator page 2790 as depicted in FIGS. 47a and 47b. FIG. 47a depicts the key performance indicator web page 2790 in an example of the invention. One example of peak time is 6:00pm to midnight where, non-peak time is midnight to 6:00pm. For peak time and non-peak time, the key performance indicator page 2790 displays the peak active modems, the sampled modems, activity ratio, contention modem counts, polling modem counts, and dedicated modem counts. For individual peak time, the key performance indicator page 2790 displays the contention modem count, the polling modem count, and the dedicated modem count. The key performance indicator page 2790 also displays the average time per user spent in contention, polling, and dedicated states.

FIG. 47b depicts the key performance indicator web page 2790 in an example of the invention. The key performance indicator page 2790 also displays the FTP rate for peak and off-peak, the peak FTP rate for upstream and downstream, and the average FTP rate for peak and off-peak downstream and upstream. The key performance indicator page 2790 also displays the average HTTP rate of peak and off-peak, the FEC corrections, the FEC uncorrectables, available channels, signal to noise ratio, and requested to scheduled modem calibration ratio. The key performance indicator page 2790 includes the maximum, minimum, and average for functioning and non-functioning channels.

The key performance indicator page 2790 includes the downstream to upstream bit ratio for different time intervals.

From the market page 2710, if the user selects the SIF statistics page 2795, then the user may select between the last 6 hours, the last 24 hours, a week, or a custom graph. If the user selects a time period, then the market performance management system 430 generates and transmits the SIF statistics page 2790 as depicted in FIG. 48. FIG. 48 depicts the SIF statistics page 2795 in an example of the invention. The graph in FIG. 48 is a graph of time vs. bits per second for 3 different SIF with a threshold.

Those skilled in the art will appreciate variations of the above-described embodiments that fall within the scope of the invention. As a result, the invention is not limited to the specific examples and illustrations discussed above, but only by the following claims and their equivalents.

The above-described elements can be comprised of instructions that are stored on storage media. The instructions can be retrieved and executed by a processor. Some examples of instructions are software, program code, and firmware. Some examples of storage media are memory devices, tape, disks, integrated circuits, and servers. The instructions are operational when executed by the processor to direct the processor to operate in accord with the invention.

Those skilled in the art are familiar with instructions, processor, and storage media.

#### CLAIMS:

We claim: